

## ABSTRACT

The present invention relates to an encoding system for encoding input video data and a multiplexing system for multiplexing a plurality of encoded streams. More particularly, it proposes a system and method that involve describing, in encoded streams, information on the picture order of input video data, and using the picture order information when generating packetized elementary stream (PES) packets, to prevent delays associated with the PES packet generation.

MPEG encoders generate PTS\_count and DTS\_count based on the information obtained from the number of fields in the input video data and describe the PTS\_count and DTS\_count data as picture order information in encoded streams. The packetizers for generating packetized elementary stream take out PTS\_count and DTS\_count described in the encoded streams, generate presentation time stamps and decoding time stamps based on PTS\_count and DTS\_count, and add these time stamps as PES header data.